



Agrometeorological Bulletin N° 01, Dekad1, January (01– 10) 2021
Issued on 13th January 2021

Summary

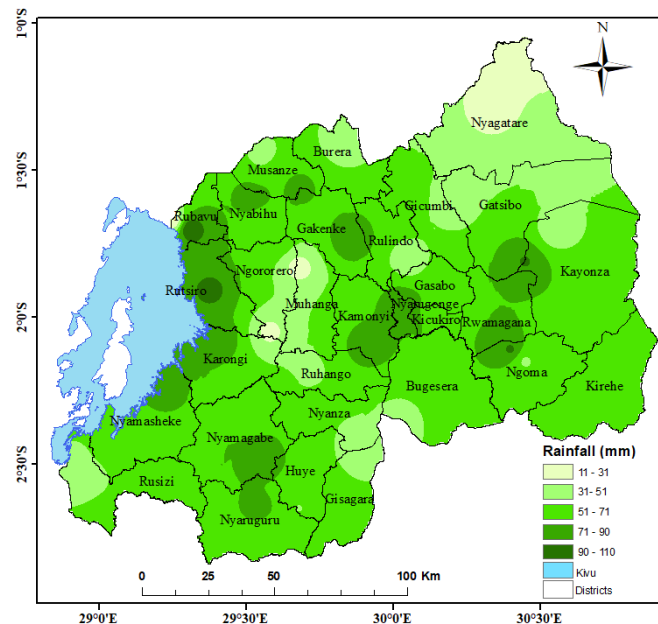
The first Dekad of January 2021 from 1st to 10th indicated that the Inter Tropical Convergence Zone (ITCZ) is still over the region. Normal to above normal rainfall was recorded in most parts of the country. The highest rainfall amount was recorded in Rubavu district at Nyundo station with 110.4mm in 7 rain-days, followed by Murunda with 98.1mm in 8 rain-days and Zaza with 93.3mm in 5 rain-days. The lowest rainfall of 11.4mm was recorded at Rubavu Airport in Western Province. The temperature was within the range of Long Term Mean. Most of the seasonal crops are on harvesting period.

1.0 Rainfall Pattern

This section provides the overview of observed rainfall amount, rainfall anomalies, comparison of observed rainfall with LTM, rainy-days and available soil moisture.

1.1 Rainfall Amount

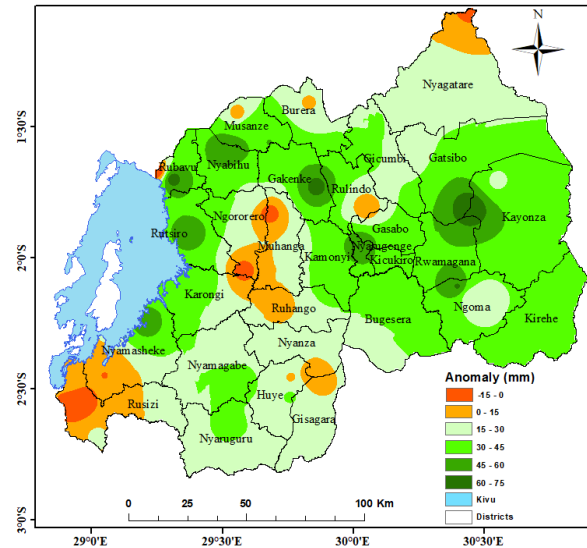
The actual total rainfall amount recorded in the first dekad of January, 2021 is presented in Map 1, it was observed that this dekad was very wet and many stations across the country recorded above normal rainfall which may affect postharvest activities. The highest rainfall amount was recorded in Rubavu district at Nyundo station with 110.4mm in 7 rain-days, followed by Murunda with 98.1mm in 8 rain-days and Zaza in Eastern Province with 93.3mm in 5 rain-days.



Map 1: Rainfall amount during 1st Dekad of January 2021

1.2 Rainfall Anomaly (Deficity and Surplus)

The rainfall anomaly as shown in map 2, shows that stations across the country experienced surplus rainfall except Rubavu airport, Kibangu, Nyange, Mibirizi and Kagitumba that had normal rainfall.



Map 2: Rainfall anomaly during 1st Dekad of January 2021

1.3. Comprison of Observed rainfall with Normal condition for the dekad.

The comparison of recorded rainfall amount and Normal records for the dekad across the country are shown in figure 1 and 2. Normal to above normal conditions were experienced across the country.

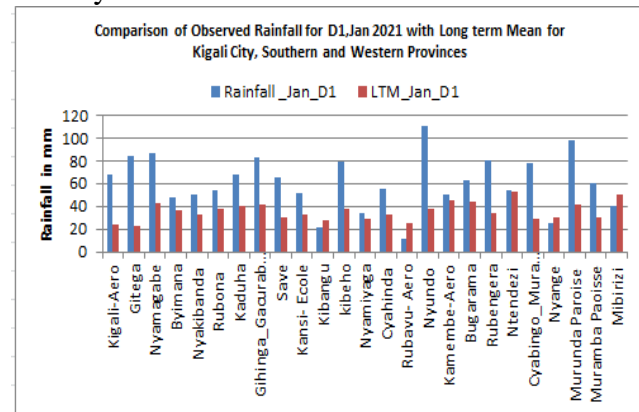


Figure 1: Comparison of observed with normal rainfall for the dekad for Kigali City, Southern and Western Provinces.

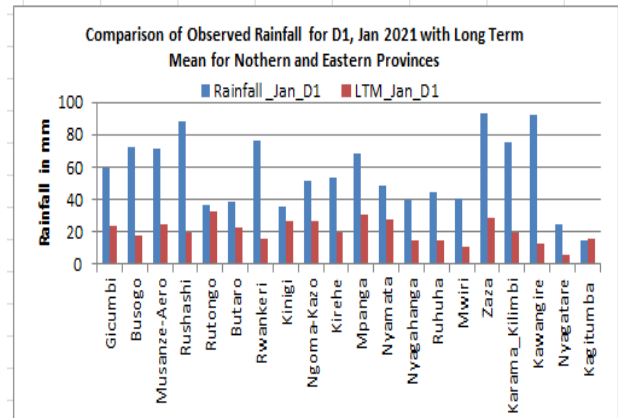
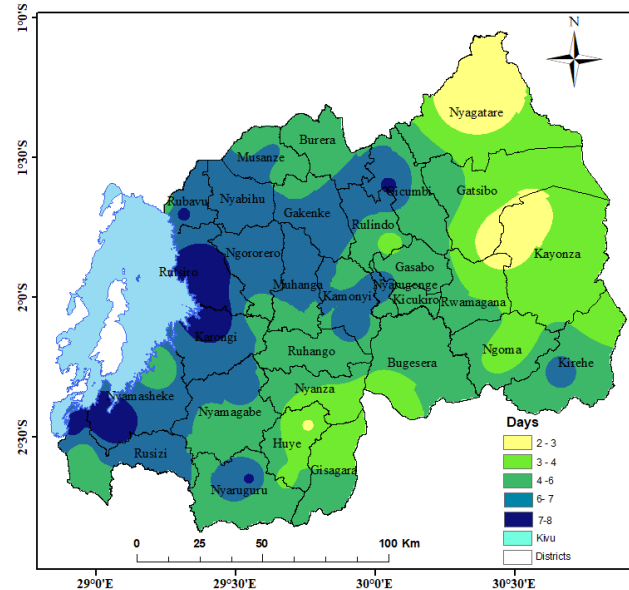


Figure 2: Comparison of Observed with Normal rainfall for Nothern and Estern Provinces.

1.4 Number of Rain Days

The Map 3 shows the distribution of number of rain days across the country. A rainy day is defined as a day with at least 0.85mm of rainfall. The distribution shows that most parts of the country had 3 to 8 of rainy days except Nyagatare and Kawangire stations which had two rainydays. The distribution was good but may led to loss of crop yield due to postharvest hunding activities which are affected. Three to six rainy days are expected in the second dekad.



Map 3: Rainy days for dekad1 of January 2020

1.5 Soil moisture condition

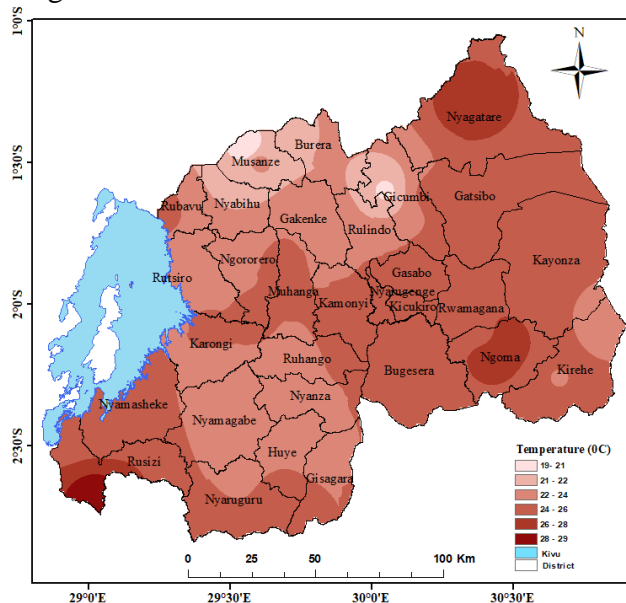
This section shows the available soil moisture content across the country. The soil moisture was increased over most parts of the country due to wet weather conditions experienced. The soil moisture content will retain in the second dekad of January 2021 due to wet weather condition expected.

2.0 Temperature observation

The average maximum and Minimum temperature across the country during the first dekad of January 2021 is highlighted in the section below.

2.1 Mean Maximum Temperature

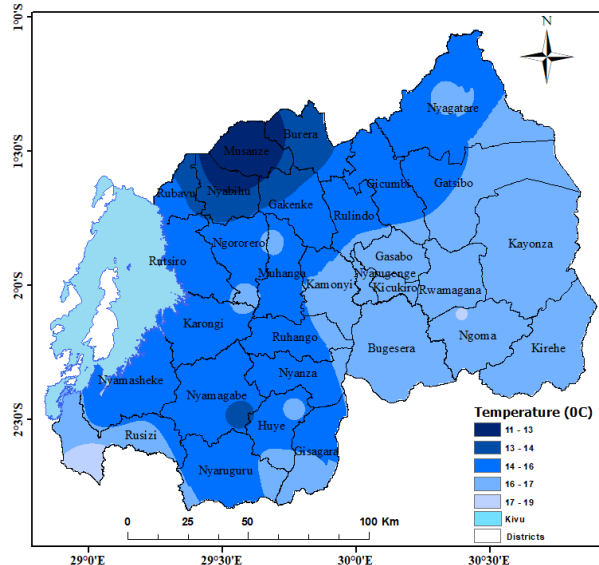
Map 4 shows the actual mean maximum temperature distribution across the country which indicates that the southwestern parts, Kigali City, northern and southern parts of the Eastern Province were warmer than the Northern, Southern and the Western Provinces. The mean maximum temperature ranged between 19.0°C and 27.5°C with at Kinigi and Nyagaare respectively with exceptional case of slightly high temperature of 29.4°C recorded at Bugarama station.



Map 4: Mean Maximum Temperature for dekad1 January 2021

2.2 Minimum Temperature

The average minimum temperature across the country is shown in Map 5. The Northern part experienced colder temperature than the other parts of the country. The minimum temperature ranged between 10.8°C and 18.9°C at Busogo and Bugarama stations respectively.



Map 5: Mean Minimum Temperature for dekad1 January 2021

3.0 Weather Outlook and Agricultural advisories for the second dekad (11-20) January, 2021.

3.1 Weather Outlook for the second dekad of January 2021.

Between 11th and 20th January 2021, light to moderate rainfall range between 30 and 120 mm across the country is expected. Rainy days are expected in the beginning of the dekad between 11th and 16th over most parts of the country and enhanced rain is expected between 13th and 15th. The expected rainfall will be above the range of Long Term Mean across the country. The distribution of the rainfall across the country is highlighted below:

Eastern Province: Rainfall ranging between 30 and 80 mm is expected. Nyagatare district is expected to experience less rainfall ranging

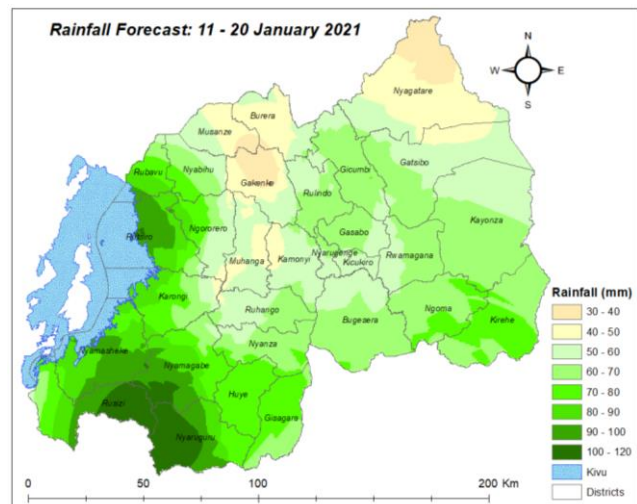
between 30 and 60mm while central parts of Kirehe and South Western parts of Ngoma are expected to receive rainfall ranging between 70 and 80mm. Remaining parts of the province are expected to receive 50 to 70 mm of rainfall.

Kigali City: Rainfall ranging between 50 and 70 mm is expected. Kicukiro district, Southern parts of Nyarugenge district and eastern parts of Gasabo district are expected to receive rainfall ranging between 50 and 60 mm while central and western parts of Gasabo and small part of northern Nyarugenge districts are expected to receive rainfall ranging between 60 and 70 mm.

Southern Province: is expected to receive rainfall ranging between 30 and 120 mm. Isolated parts of Muhanga district and western parts of Kamonyi are expected to receive rainfall ranging between 40 and 50 mm, remaining parts of Muhanga, Kamonyi including Ruhango, Nyanza districts and southern parts of Gisagara district are expected to receive rainfall ranging between 50 and 70mm. Huye district and the remaining parts of Gisagara are expected to receive rainfall ranging between 70 and 80 mm. Most parts of Nyamagabe and Nyaruguru districts are expected to receive rainfall ranging between 70 and 100 mm but western parts of Nyaruguru and Nyamagabe located near Nyungwe National Park are expected to receive up to 120 mm of rainfall.

Western Province: Eastern parts of Nyabihu, Ngororero, Karongi and Northern parts of Rubavu are expected to receive rainfall ranging between 50 and 70 mm while Rutsiro, Nyamasheke, most parts of Rusizi districts and remaining parts of Rubavu, Ngororero and Karongi districts are expected to receive rainfall ranging between 70 and 100 mm. Only small part of Rusizi located near Nyungwe National Park is expected to receive up to 120 mm of rainfall.

Northern Province: Rainfall ranging between 30 and 70 mm is expected. Rainfall ranging between 60 and 70 mm is expected in most parts of Gicumbi and southern parts of Rulindo. Rainfall ranging between 50 and 60 mm is expected in South Eastern parts of Burera and Gakenke, in Western parts of Musanze and Northern parts of Rulindo and Gicumbi districts while remaining parts of the province are expected to receive rainfall ranging between 30 and 50 mm.



Map 6: Rainfall Forecast for the second decade of January 2021

3.2 Agricultural Activity/Advisories

Generally, in most parts of the country, seasonal crops are on harvesting period. The focus in these coming days should be on postharvest activities and these areas with high rainfall amount should closely monitored to avoid possible flooding. Farmers are advised to work closely with Agriculture Extension Officers for detailed information which will support their agriculture activities. For more meteorological information you can visit Meteo Rwanda's website: www.meteorwanda.gov.rw or call the toll free number 6080.